



P.B. 5818 - Patentlaan 2
2280 HV Rijswijk (ZH)
☎ +31 70 340 2040
TX 31651 epo nl
FAX +31 70 340 3016

Europäisches
Patentamt

Zweigstelle
in Den Haag
Recherchen-
abteilung

European
Patent Office

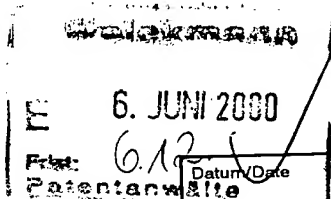
Branch at
The Hague
Search
division

Office européen
des brevets

Département à
La Haye
Division de la
recherche

Weiss, Wolfgang, Dipl.-Chem. Dr.
Postfach 86 08 20
81635 München
ALLEMAGNE

WW



02.06.2000

Zeichen/Ref./Réf. 20933P EP	Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n°. 99116056.5
Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire Max-Planck-Gesellschaft zur Förderung der Wissensc	

COMMUNICATION

The European Patent Office herewith transmits

- ☐ the European search report
- ☐ the declaration under Rule 45 EPC
- ☒ the partial European search report under Rule 45 EPC
- ☐ the supplementary European search report concerning the international application under Article 157(2) EPC relating to the above-mentioned European patent application. Copies of the documents cited in the search report are enclosed.

The following specifications given by the applicant have been approved by the Search Division :

- ☒ Abstract ☐ Title ☐ Figure
- ☐ The abstract was modified by the Search Division and the definitive text is attached to this communication.
- ☐ The following figure will be published with the abstract, since the Search Division considers that it better characterises the invention than the one indicated by the applicant.
- Figure:
- ☒ Additional copy(copies) of the documents cited in the European search report.

REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.



EPO Form 1507 02.93



European Patent
Office

PARTIAL EUROPEAN SEARCH REPORT

Application Number

which under Rule 45 of the European Patent Convention EP 99 11 6056 shall be considered, for the purposes of subsequent proceedings, as the European search report

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	DONG JIANYING ET AL: "Metalloprotease-mediated ligand release regulates autocrine signaling through the epidermal growth factor receptor." PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA MAY 25, 1999, vol. 96, no. 11, 25 May 1999 (1999-05-25), pages 6235-6240, XP002136687 ISSN: 0027-8424 * the whole document *	1-18	A61K31/38 A61K31/16 A61K38/55 A61K38/05 G01N33/50 A61P11/06 A61P31/00 A61P35/00
X,D	BROWN ET AL: "cell surface ectodomain cleavage of human amphiregulin precursor is sensitive to a metalloprotease inhibitor" JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 273, no. 27, 1998, pages 17258-17268, XP002136688 * the whole document *	1-18	TECHNICAL FIELDS SEARCHED (Int.Cl.7) A61K
INCOMPLETE SEARCH			
<p>The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC to such an extent that a meaningful search into the state of the art cannot be carried out, or can only be carried out partially, for these claims.</p> <p>Claims searched completely :</p> <p>Claims searched incompletely :</p> <p>Claims not searched :</p> <p>Reason for the limitation of the search: see sheet C</p>			
Place of search THE HAGUE		Date of completion of the search 12 May 2000	Examiner Niemann, F
CATEGORY OF CITED DOCUMENTS			
<p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

3
EPO FORM 1503 03.82 (P04/C07)



DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	EP 0 780 386 A (HOFFMANN LA ROCHE ; AGOURON PHARMA (US)) 25 June 1997 (1997-06-25) * page 3, line 1 - line 20 * * page 3, line 54 - page 4, line 5; claims 1,30-34 * ---	1-13, 15-18	
X,D	DAUB ET AL: "role of transactivation of the EGF receptor in signalling by G-protein-coupled receptors" NATURE, vol. 379, 1996, pages 557-560, XP002136689 * the whole document * ---	19	
A		1-18	
X,D	DAUB ET AL: "signal characteristics of g protein transactivated EGF receptor" EMBO JOURNAL, vol. 16, no. 23, 1997, pages 7032-7044, XP002136690 * the whole document * ---	19	TECHNICAL FIELDS SEARCHED (Int.Cl.7)
A		1-18	
D,A	IZUMI ET AL: "a metalloprotease disintegrin, mdc9/meltrin-gamma/adam9 and pkcdelta are involved in tpa induced ectodomain shedding of membrane anchored heparin binding egf like growth factor" EMBO JOURNAL, vol. 17, no. 24, 1998, pages 7260-7272, XP002136691 * the whole document * ---	1-13	
D,A	WERB Z: "ecm and cell surface proteolysis : regulating cellular ecology" CELL, vol. 91, 1997, pages 439-442, XP002136692 * the whole document * ---	1-13	
	--- -/--		



DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
A	TAKEYAMA KIYOSHI ET AL: "Epidermal growth factor system regulates mucin production in airways." PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA MARCH 16, 1999, vol. 96, no. 6, 16 March 1999 (1999-03-16), pages 3081-3086, XP002136693 ISSN: 0027-8424 * page 3086, left-hand column, line 24 - line 32 *	16	
A	ROMANO ET AL: "helicobacter pylori upregulates expression of epidermal growth factor related peptides, but inhibits their proliferative effect in mkn 28 gastric mucosal cells" JOURNAL OF CLINICAL INVESTIGATION, vol. 101, no. 8, 1998, pages 1604-1613, XP002136694 * the whole document *	16	TECHNICAL FIELDS SEARCHED (Int.Cl.7)



Although claims 17-18 partially (in so far it concern in vivo method) are directed to a method of treatment of the human/animal body (Article 52(4) EPC), the search has been carried out and based on the alleged effects of the compound/composition.

Claim(s) searched completely:
8-10, 14, 19

Claim(s) searched incompletely:
1-7, 11-13, 15-18

Reason for the limitation of the search:

Present claims 1-7, 11-13, 15-18 relate to the use of compounds which have only been defined by a certain characteristic, that is "modulate G-protein mediated signal transduction", whereas the application provides support within the meaning of Article 84 EPC and/or disclosure within the meaning of Article 83 EPC for only a very limited number of such compounds.

In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Consequently, the search has been carried out for those parts of the claims which appear to be supported and disclosed, namely those parts relating to modulators of proteinase which inhibit the cleavage of growth factor ligand precursor.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 99 11 6056

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

12-05-2000

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0780386 A	25-06-1997	AU 700725 B	14-01-1999
		AU 7548296 A	31-07-1997
		BR 9606134 A	03-11-1998
		CA 2193178 A	21-06-1997
		CN 1160045 A	24-09-1997
		CZ 9603740 A	14-01-1998
		HR 960612 A	28-02-1998
		HU 9603494 A	30-11-1998
		JP 2921673 B	19-07-1999
		JP 9249638 A	22-09-1997
		NO 965413 A	23-06-1997
		NZ 299941 A	27-05-1998
		PL 317604 A	23-06-1997
		TR 970547 A	21-07-1997
		US 5932595 A	03-08-1999
